Patent Claims

1. A method for allocating transmission capacity to connections in a radio communication system,
characterized
in that a transmission rate (B) is allocated to a connection by means of a radio communication interface between a base transceiver station (NB) and a subscriber station (UE, UE1, UE2) on the basis of a connection-specific level of path damping in the radio communication interface.

2. The method as claimed in claim 1,
characterized
in that the transmission rate (B) is allocated on the basis of a distance between the subscriber station (UE, UE1, UE2) and the base transceiver station (NB).

3. The method as claimed in claim 1 or 2, characterized
in that the transmission rate (B) is allocated on the basis of an interference situation at the location of the subscriber station (UE, UE1, UE2) in a radio cell (Z) of the base transceiver station (NB).

4. The method as claimed in a preceding claim,
characterized
in that at least one service to be transmitted on the connection can be transmitted at a variable transmission rate (B).

5. The method as claimed in the preceding claim,
characterized
in that the service to be transmitted is a non-real-time service and/or is a real-time service, with adaptive source coding being carried out for the case of a real-time service.

6. The method as claimed in a preceding claim, characterized in that a particular transmission rate (B) is allocated for a respective spectrum of path damping levels (PL).

7. The method as claimed in a preceding claim, characterized in that the transmission rate (B) is additionally varied on the basis of a relative or absolute transmitter power (P) for the connection.

8. The method as claimed in a preceding claim, characterized in that the transmission rate (B) is additionally varied on the basis of a present level of traffic loading in the radio cell (Z) of the base transceiver station (NB).

9. The method as claimed in a preceding claim, characterized in that the transmission rate (B) in the downlink (DL) from the base transceiver station (NB) to the subscriber station (UE, UE1, UE2) and/or in the uplink (UL) from the subscriber station (UE, UE1, UE2) to the base transceiver station (NB) is varied on the basis of the respective level of path damping (PL).

10. The method as claimed in a preceding claim, characterized in that subscriber separation is carried out in the radio communication system using a CDMA method.

11. Method as claimed in the preceding claim, characterized

in that orthogonal spreading codes are used in the downlink (DL) and/or in the uplink (UL).

12. The method as claimed in claim 10 or 11,
characterized
in that the connection has a set of transmission rates (B) made available to it, the respective transmission rate (B) allocated being defined by a spreading code and a particular spreading factor.

13. The method as claimed in a preceding claim,
characterized
in that long-term transmission rate allocation based on path damping and/or on transmitter power is carried out by a Radio Resource Control layer (RRC layer) in the radio communication system.

14. The method as claimed in claim 13,
characterized
in that the transmission rate (B) is varied using a Transport Format Set configuration/reconfiguration procedure in the RRC layer.

15. The method as claimed in claim 13,
characterized
in that the transmission rate (B) is varied using a Transport Format Set restriction procedure in the RRC layer.

16. The method as claimed in claim 13,
characterized
in that the transmission rate (B) is allocated by a utilization-level and connection-acceptance checking function in the RRC layer.

17. The method as claimed in one of claims 1 to 12, characterized in that a Media Access Control layer (MAC layer) selects a suitable transport format from a set of different transport formats defined when a connection is set up.

18. The method as claimed in the preceding claim, characterized in that the MAC layer selects a suitable transport format from the set of transport formats in a soft handover situation, allowing for all possible signal paths.

19. The method as claimed in a preceding claim, characterized in that allocation of the transmission rate (B) is based on path damping measurements carried out by the subscriber station (UE, UE1, UE2) for handover purposes.

20. The method as claimed in a preceding claim, characterized in that a variation in the present transmission rate (B) is initiated by an overload checking function on the basis of path damping measurements in the subscriber station (UE).

21. The method as claimed in a preceding claim, characterized in that the transmitter power (P) for a respective carrier of the base transceiver station (NB) is signaled to a radio network controller (RNC) via the Iub interface.

22. The method as claimed in claim 21, characterized

in that the signaling takes place as a result of an appropriate field being added within the Iub/Iur user framework protocol.

23. The method as claimed in claim 21 or 22, characterized in that the signaling takes place using independent cyclic or event-controlled signaling messages.

24. The method as claimed in a preceding claim, characterized in that the transmission rate (B) is additionally allocated for a shared channel in the downlink (DL) on the basis of a transmitter power (P).

25. The method as claimed in a preceding claim, characterized in that a joint detection method is carried out at the reception end in the downlink (DL) and/or in the uplink (UL).

26. The method as claimed in one of the preceding claims, characterized in that the radio communication interface is organized on the basis of a TDD method which uses a plurality of time slots each forming a time frame, transmission in the downlink (DL) and in the uplink (UL) taking place at separate times in the same frequency band.

27. The method as claimed in one of the preceding claims, characterized in that the radio communication system is in the form of a mobile radio system or is in the form of a wireless subscriber line system.

28. A radio communication system having at least one base transceiver station (NB) and at least one subscriber station (UE) for carrying out the method as claimed in one of the preceding claims.